

CLAIMS

I/We claim:

- [c1] 1. A method for handling incoming aircraft operation instructions, comprising:
- receiving from a source off-board an aircraft an instruction for changing a characteristic of the aircraft;
- automatically displaying at least a portion of the instruction at a first display location of the aircraft;
- in response to receiving a first input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at a second display location without the instruction being manually regenerated onboard the aircraft and without the instruction becoming part of a flight plan list of automatically executed flight segments; and
- in response to receiving a second input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at a third display location without the instruction being manually regenerated onboard the aircraft.
- [c2] 2. The method of claim 1 wherein displaying at least a portion of the instruction at a first display location includes displaying at least a portion of the instruction at a communications display of the aircraft, and wherein displaying at least a target portion of the instruction at a second display location includes displaying at least a target portion of the instruction at a preview display of a mode control panel of the aircraft, and wherein displaying at least a target portion of the instruction at a third display location includes displaying at least a target portion at an active display of the mode control panel.

- [c3] 3. The method of claim 1, further comprising automatically implementing the instruction in response to receiving at least one further input signal from an operator of the aircraft.
- [c4] 4. The method of claim 1, further comprising implementing the instruction by changing a characteristic of the aircraft to achieve the target.
- [c5] 5. The method of claim 1 wherein receiving an instruction includes receiving the instruction via a data link.
- [c6] 6. The method of claim 1 wherein receiving an instruction includes receiving an instruction from air traffic control.
- [c7] 7. The method of claim 1 wherein the target portion of the instruction includes an identification of a target, and wherein the method further comprises implementing the instruction by automatically directing the aircraft to the target or providing guidance to the operator to direct the aircraft to the target.
- [c8] 8. The method of claim 1 wherein receiving an instruction includes receiving an instruction having at least one of a target altitude, a target speed and a target direction.
- [c9] 9. The method of claim 1 wherein receiving an instruction includes receiving an instruction having a lateral target and an indication of which direction the aircraft will turn to attain the lateral target.
- [c10] 10. The method of claim 1 wherein receiving an instruction includes receiving an instruction having a lateral target and an indication of whether the lateral target is a true bearing or a magnetic bearing.

- [c11] 11. The method of claim 1 wherein receiving an instruction includes receiving an instruction for at least one of a requested radio frequency setting, transponder frequency setting, and altimeter setting.
- [c12] 12. A method for handling incoming aircraft operation instructions, comprising:
receiving via a data link an instruction for changing a flight behavior of an aircraft;
in response to receiving a first input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at a preview display of an aircraft mode control panel without the instruction being manually regenerated onboard the aircraft, and without causing the instruction to become part of a flight plan list of automatically executed flight segments, the target portion identifying a target to which the aircraft can be directed; and
upon receiving a second input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at an active target display of the aircraft mode control panel without the instruction being manually regenerated after being received on the aircraft.
- [c13] 13. The method of claim 12, further comprising automatically implementing the instruction by automatically directing the aircraft to the target.
- [c14] 14. The method of claim 12, further comprising automatically implementing the instruction by providing visually accessible guidance to an operator of the aircraft for controlling the aircraft to the target.

[c15] 15. The method of claim 12, further comprising in response to receiving the first signal, transmitting an indication of receipt of the instruction to the source of the instruction.

[c16] 16. An aircraft system including a computer-readable medium having contents that perform a method for handling incoming aircraft operation instructions, the method comprising:

receiving from a source off-board an aircraft an instruction for changing a characteristic of the aircraft;

automatically displaying at least a portion of the instruction at a first display location of the aircraft;

in response to receiving a first input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at a second display location without the instruction being manually regenerated onboard the aircraft and without the instruction becoming part of a flight plan list of automatically executed flight segments; and

in response to receiving a second input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at a third display location without the instruction being manually regenerated onboard the aircraft.

[c17] 17. The system of claim 16, further comprising an aircraft carrying the computer-readable medium.

[c18] 18. The system of claim 16, further comprising:
the first display location, and wherein the first display location includes a communications display of the aircraft;
the second display location, wherein the second display location includes a target display of a mode control panel of the aircraft; and

the third display location, wherein the third display location includes an active display of the mode control panel.

[c19] 19. The system of claim 16 wherein the method performed by the computer-readable medium further comprises automatically implementing the instruction in response to receiving at least one further input signal from an operator of the aircraft.

[c20] 20. The system of claim 16 wherein receiving an instruction includes receiving the instruction via a data link.

[c21] 21. The system of claim 16 wherein the target portion of the instruction includes an identification of a target, and wherein the method further comprises implementing the instruction by automatically directing the aircraft to the target or providing guidance to the operator to direct the aircraft to the target.

[c22] 22. The system of claim 16 wherein receiving an instruction includes receiving an instruction having at least one of a target altitude, a target speed and a target direction.

[c23] 23. The system of claim 16 wherein receiving an instruction includes receiving an instruction having a lateral target and an indication of whether the lateral target is a true bearing or a magnetic bearing.

[c24] 24. The system of claim 16 wherein receiving an instruction includes receiving an instruction for at least one of a requested radio frequency setting, transponder frequency setting, and altimeter setting.

[c25] 25. An aircraft system including a computer-readable medium having contents that perform a method for handling incoming aircraft operation instructions, the method comprising:

receiving via a data link an instruction for changing a flight behavior of an aircraft;

in response to receiving a first input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at a preview display of an aircraft mode control panel without the instruction being manually regenerated onboard the aircraft, and without causing the instruction to become part of a flight plan list of automatically executed flight segments, the target portion identifying a target to which the aircraft can be directed; and

upon receiving a second input signal directed by an operator onboard the aircraft, displaying at least a target portion of the instruction at an active target display of the aircraft mode control panel without the instruction being manually regenerated after being received on the aircraft.

[c26] 26. The system of claim 25, further comprising an aircraft carrying the computer-readable medium.

[c27] 27. The system of claim 25, further comprising the mode control panel.

[c28] 28. A system for handling incoming aircraft operation instructions, comprising:

means for receiving from a source off-board an aircraft an instruction for changing a characteristic of the aircraft;

first display means for automatically displaying at least a portion of the instruction at a first display location of the aircraft;

second display means for displaying at least a target portion of the instruction at a second display location in response to receiving a first input signal directed by an operator onboard the aircraft, without the instruction being manually regenerated onboard the aircraft and without the instruction becoming part of a flight plan list of automatically executed flight segments; and

third display means for displaying at least a target portion of the instruction at a third display location in response to receiving a second input signal directed by an operator onboard the aircraft, without the instruction being manually regenerated onboard the aircraft.

[c29] 29. The system of claim 28, further comprising the aircraft.

[c30] 30. The system of claim 28 wherein the first display means are configured to automatically display at least a portion of the instruction at a communication display of the aircraft, and wherein the system further comprises the communication display.

[c31] 31. The system of claim 28 wherein the second display means are configured to display at least a target portion of the instruction at a preview display of an aircraft mode control panel, and wherein the system further comprises the mode control panel.

[c32] 32. The system of claim 28 wherein the third display means are configured to display at least a target portion of the instruction at an active display of an aircraft mode control panel, and wherein the system further comprises the mode control panel.

[c33] 33. An aircraft system for handling incoming aircraft operation instructions, comprising:

- a receiver configured to receive from a source off-board an aircraft an instruction for changing a characteristic of the aircraft;
- a communication display coupled to the receiver to display at least a portion of the instruction; and
- a mode control panel having a preview display configured to display at least a target portion of the instruction in response to a first input signal directed by an operator onboard the aircraft, without the instruction being manually regenerated onboard the aircraft and without the instruction becoming part of a flight plan list of automatically executed flight segments, the mode control panel further having an active display configured to display at least a target portion of the instruction in response to a second input signal directed by an operator onboard the aircraft, without the instruction being manually regenerated onboard the aircraft.

[c34] 34. The system of claim 33, further comprising an aircraft housing the receiver, the communication display and the mode control panel.

[c35] 35. The system of claim 33, further comprising:
a first input device operatively coupled to the preview display to receive the first input signal; and
a second input device operatively coupled to the active display to receive the second input signal.

[c36] 36. The system of claim 33, further comprising:
a first input device operatively positioned proximate to the communication display and operatively coupled to the preview display to receive the first input signal; and

a second input device housed by the mode control panel and operatively coupled to the active display to receive the second input signal.